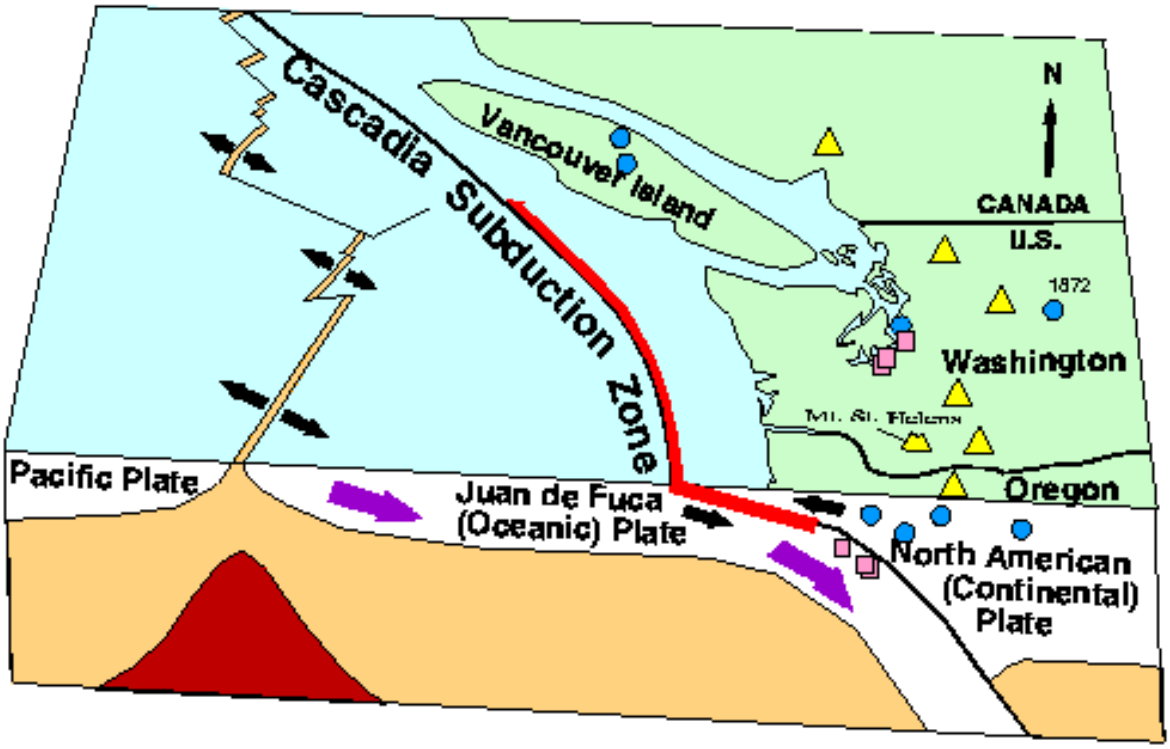

Deep Earthquakes (40 miles below the Earth's surface) are within the subducting oceanic plate as it bends beneath the continental plate. The largest deep Northwest earthquakes known were in 1949 (M 7.1), 1965 (M 6.5), and 2001 (M 6.8).

Shallow earthquakes (less than 15 miles deep) are caused by faults in the North American Continent. The Seattle fault produced a shallow magnitude 7+ earthquake 1,100 years ago. Other magnitude 7+ earthquakes occurred in 1872, 1918, and 1946.

Subduction Earthquakes are huge quakes that result when the boundary between the oceanic and continental plates ruptures. In 1700, the most recent Cascadia Subduction Zone earthquake sent a tsunami as far as Japan.

Mt. St. Helens/Other Cascade Volcanos

Source: http://www.ess.washington.edu/SEIS/PNSN/

FIGURE **4.3-2**

CROSS-SECTION AND MAP SHOWING PRINCIPLE TECTONIC FEATURES AND HISTORICAL EARTHQUAKES IN WASHINGTON AND SOUTHERN BRITISH COLUMBIA

BP/CHERRY POINT COGENERATION PROJECT

Prepared by: Golder Associates